

Ethnicity and eldercare: Comparison of attitudes toward adult care homes and care by families

By: [S. Sudha](#) and Elizabeth J. Mutran

Mutran, E. J., & Sudha, S. (1999). Ethnicity and eldercare: Comparison of attitudes toward adult care homes and care by families. *Research on Aging*, 21, 570-94.

<https://doi.org/10.1177/0164027599214003>

***© 1999 Sage Publications, Inc. Reprinted with permission. No further reproduction is authorized without written permission from SAGE. This version of the document is not the version of record. ***

Abstract:

This study examines attitudes toward rest homes among elderly African Americans and Whites and their caregivers. Dislike of rest homes, preference for family care, and unwillingness to consider rest home placement are analyzed by linear structural equation and logistic regression models. Results show significant ethnic differences among elderly persons and caregivers. Among elders, African Americans are stronger in their desire for family care but dislike rest homes less than Whites do. African American elders are less willing than Whites to consider rest home placement; care-givers' differences are not as pronounced. Results suggest that the cultural preference for family care often attributed to ethnic differences is also partly determined by dislike of institutionalized care and social structural factors. The authors propose a theoretical framework that models attitudes toward health service use as outcomes of ethnicity and social structural factors and interpret the results against a backdrop of ethnic differences in historical and material conditions.

Keywords: eldercare | care homes | nursing homes | caregivers

Article:

Researchers highlight attitudes toward institutional care as important predictors of placement of elderly persons (Mui and Burnette 1994; Mutran and Ferraro 1988). They also highlight ethnic differences in the *use* of long-term care facilities counter to ethnic differences in *need*. For example, despite evidence of greater disability, elderly African Americans are placed in nursing homes between half and three-quarters the rate of elderly Whites (Belgrave, Wykle, and Choi 1993; Greene and Ondrich 1990; Hing 1987; Smith 1993). For poorly understood reasons, minority elders currently underutilize services that might enhance quality of care and of life (Kart 1991; Kulys 1990). Despite this, few studies examine ethnic differences in attitudes toward long-term institutional care.

Particularly for ethnic minorities, so-called cultural factors, including beliefs and attitudes, are often invoked to explain observed differentials in health service use, but these are assumed rather than documented or studied (Belgrave et al. 1993). In view of the increasing diversity of older

Americans, underlying reasons for ethnic differences in use of long-term care need to be examined to clarify the role of cultural factors.

This article addresses this gap in the literature on elderly Americans and health service use. The purpose of this research is, specifically, to clarify whether attitudes professed toward long-term institutional care and familial care differ among African Americans and Whites. We examine attitudes as outcomes of structural circumstances and lifetime experiences of members of different ethnic groups. Group differences in covariates of attitudes are analyzed to compare processes of attitude formation across ethnic groups in order to investigate whether they are similar or different.

A Note on Long-Term Care Facilities

In North Carolina, there are two major divisions in licensed long-term care facilities: nursing homes that provide round-the-clock medical care and supervision for the elderly and disabled, and adult care homes, which offer housing, meals, and help with activities of daily living (ADLs) to those less impaired. The latter are also known as rest homes, board-and-care homes, or personal care homes. North Carolina has fewer than the national average number of nursing-home beds but more adult care home beds than the national average, and a distinctive reliance on the latter as a substitute for the former (Falcone, Bolda, and Leak 1991). It is the latter, the adult care home, that is the subject of this article, as we expect this type of facility to be an option for long-term care that is more available to all persons. Cost for services in adult care homes is less than the cost of nursing-home care, and the availability of African American owned-and-operated adult care homes is greater.

The bulk of the literature examining elderly persons' attitudes toward and use of long-term care facilities focuses on nursing homes, with little specific reference paid to various subtypes of facilities. The U.S. Bureau of the Census definition of long-term care institutions for elderly persons includes nursing homes and to some extent other facilities including assisted living centers, board-and-care homes, and so on, which are alternatives to nursing homes (Pynoos and Golant 1996). The literature we examine, however, mostly uses the term *nursing homes* without specifying whether the alternative facilities are subsumed in the concept or not. It is also unclear to what extent the public distinguishes among the various facilities in common parlance.

Little Prior Examination of Ethnic Differences in Attitudes

Ethnic variation in attitudes toward long-term care for the elderly is conspicuously underresearched in the United States, although the literature stresses the importance both of ethnicity and of attitudes in the use of long-term care. Recent studies, which examine the persistent ethnic difference in the use of long-term care by seniors, call for greater scrutiny of attitudes such as familism and perceptions of institutional care among different cultural groups, since these issues appear important but have hitherto rarely been researched (Tennstedt and Chang 1998; Wallace et al. 1998).

Typically, both ethnicity and attitudes are modeled as exogenous variables in an additive model. For example, Mui and Burnette (1994) found that frail elderly African Americans are less likely

than Whites to use nursing homes and that positive attitudes toward nursing homes increase individuals' chances of using long-term institutional care or community-based care versus in-home care. However, no analysis of how attitudes play a varying role in the care choices of elderly persons of different ethnicities is offered.

Studies of the role of ethnicity in elderly Americans' long-term-care use typically describe the proportions of various groups in diverse living arrangements (e.g. Himes, Hogan, and Eggebeen 1996). Ethnicity is considered as a residual category, accounting for variance after other factors are controlled. Interpretation of the remaining association leads in one of two directions. One, minority elders face structural barriers in accessing institutions due to discrimination, poverty, lack of familiarity with the system, and service and payment structures. Or, alternatively, a cultural preference among ethnic minorities for families to "take care of their own" is an underlying cause of lower minority presence in institutional care (Wallace 1990; White-Means and Thornton 1990; Yeo 1993). Although the latter view acknowledges that ideals of family care might vary and that support networks may differ across ethnic groups, it is also criticized as erasing class differences within groups, stereotyping caregiving practices across groups, and being based on assumption rather than on documentation. It also underplays the importance of structural barriers to access and fails to consider how structural constraints might shape cultural values (Belgrave et al. 1993). Attitude variables in such models also represent cultural preferences and are treated as markers of static values inherited, shared, and expressed by members of different ethnic groups.

A parallel research trend analyzes attitudes as outcomes of other covariates. Beliefs about quality of care and of life in nursing homes predict individuals' fear of these institutions, expectations of residing in one, and attitudes toward placing elderly family members therein. Not surprisingly, perception of higher costs of nursing-home care adds to fears (Biedenharn and Normoyle 1991; Cohen et al. 1988). Ratings of facilities, though based on ad hoc and infrequent prior visits, shape attitudes (Biedenharn and Normoyle 1991; Cafferata and Stone 1992). These studies, however, examine individual-level variables or indicators of nursing-home organization. They do not consider ethnicity in their approaches or findings, nor do they seek a social explanation of attitude formation.

Thus, these research trends have not examined the role of ethnicity in the formation of attitudes toward use of long-term care facilities for seniors in a consistent manner. The result is that there is little clarity or consensus regarding the extent to which ethnic differences in the use of long-term care by minority seniors are the result of cultural preferences and practices, racial barriers, or other factors (Wallace 1990). The lack of socially informed analyses of ethnic differences reflects a recent trend within medical sociology to ignore fundamental social science concerns regarding stratification, power, or value and meaning systems (i.e., culture) so as to scrutinize organizational and individual details that will facilitate cost control. This trend is critiqued by scholars who remind us of the connections between societal structures and health systems and the need for researchers and policy makers to be sensitive to such connections (Mechanic 1993, 1995; Pescosolido and Kronenfeld 1995).

Recent approaches are deepening our understanding of ethnic differences in health service use. Moving beyond describing only variation in *levels* of use, they analyze differences in the *process*

of use between groups, illustrating the complex societal dynamics of which ethnicity is a marker (Miller et al. 1996; Wolinsky et al. 1989). This study adds to such efforts by systematically specifying the role of attitudes in health service use and considering attitudes as influenced by the structural circumstances and lifetime experiences of different ethnic groups embedded within a societal context.

Modeling Ethnicity and Attitude Formation

The research trend away from wider social science concerns was apparent in most applications of the Andersen behavioral model, the conceptual framework predominantly used to examine health service utilization (see review in Andersen 1995). Responding to criticism that it ignored social and cultural issues, this model in its latest form envisions a dynamic framework of explanation incorporating feedback loops between outcomes of health status and consumer satisfaction, and predisposing, enabling, and need factors. Personal health practices and use-of-service variables mediate between these three sets of explanatory factors and outcomes. Ethnicity and health beliefs are both conceptualized as components of social structure, thus as predisposing factors. The health care system and the external environment also influence outcomes (Andersen 1995, Figure 7).

We argue, however, that conceptualizing both health beliefs and ethnicity as predisposing factors does not, despite feedback loops, overcome the drawbacks of the approaches described above, which modeled these as exogenous variables ignoring their mutual connections and the dynamic process of attitude formation. We assert that although ethnic differences in health service use suggest ethnic variations in beliefs and attitudes toward service use, attitudes are at least partly determined by structural circumstances and the lifetime experiences of individuals of different ethnicities, and thus imply social causation.

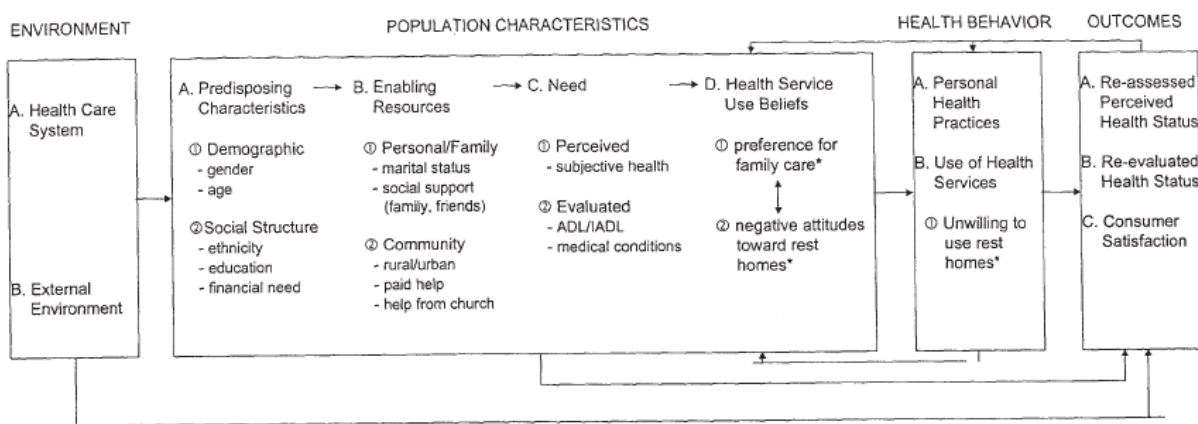


Figure 1. Modeling Attitudes Toward Long-Term Institutional Care for the Elderly

NOTE: ADL = activities of daily living; IADL = instrumental activities of daily living.

*dependent variables analyzed in this study.

We therefore propose a model of health service utilization that conceptualizes attitudes toward institutional care for elderly persons as health beliefs and examines them as outcomes of demographic and social structural characteristics including ethnicity; as personal, family, and

community resources; and as subjective and evaluated perceptions of health (see Figure 1). This model modifies Andersen's (1995, Figure 7) framework in away that allows examination of the impact of varying individual and background characteristics on belief or attitude formation. The reciprocal effects of attitudes of preference for family care and dislike of rest homes are also considered. The influence of these background factors and resulting attitudes on actual willingness to use rest homes can then be examined. The analyses are interpreted against the backdrop of regional socioeconomic and political history to include the impact of the external environment.

Based on this proposed model, we have three interrelated hypotheses. First, that there will be ethnic differences in attitudes toward family care and use of rest homes and that attitudes toward use of health care services will be influenced by health care need and the burden of care. Those with greater physical limitations will have a more positive attitude, and those caregivers whose task is more burdensome will also be more positive. Second, we argue that these attitudes are at least partly socially determined. Based on the speculation that African Americans evince a greater cultural preference to take care of their own, we hypothesize that this group will have greater disfavor for rest homes and greater favor for family care than Whites do. However, we also hypothesize that African American attitudes toward use of health services at least partly reflect the structural barriers minority groups face in the United States. Therefore, we expect education, income, marital status, presence of children, and other kin support to influence these attitudes. Since the social causation of attitudes has been less researched, in this study we empirically examine the covariates of attitudes and whether the pattern of covariates differs by ethnic group. Our primary goal is to argue that conceptual frameworks used to model health behavior should henceforth correctly specify the social causation of health beliefs.

Data

Data are from a 1994 survey examining the long-term care needs and choices of elderly North Carolinians, specifically ethnic differences in the use of domiciliary care homes. To maximize potential comparisons, counties with a population size of at least 50,000, a minority presence of at least 10%, and at least five family care homes and two adult care homes were selected. These counties were then grouped into four strata based on population size and proportion minority: urban high minority, urban low minority, rural high minority, and rural low minority. An urban county was defined as one having a population greater than 100,000; a high-minority county was one with a minority presence greater than 19%. A random sample of 4 counties from each urban and 6 from each rural stratum was then drawn, yielding a total of 20 counties.

Persons age 65 and older were then randomly sampled from each county using the Health Care Finance Administration's (HCFA) Medicare Beneficiary Utilization tape. A group of 4,236 elderly persons were randomly identified from the HCFA tape. Of the initial names, 904 (21%) could not be located despite repeated attempts. Of the remaining 3,332 persons, 411 (12%) refused to be screened for eligibility. The remainder were screened for eligibility, which was defined on two dimensions: residence in the community (i.e., not in any adult care facility) and frailty (able to do one or more ADL or instrumental activities of daily living—IADL—only with difficulty). A further 2,069 (approximately 49% of the seniors originally identified from the HCFA tape) did not meet both the eligibility criteria of frailty and residence in the community,

or they had moved or were deceased. This resulted in a pool of 852 persons from whom to select the final sample. Of these, 683 individuals, the target sample size, were randomly selected, of whom 8 refused to participate further. The remainder were administered the Short Portable Mental Status Questionnaire. Of these, 138 were unable to complete the questionnaire due to mental incompetence (a score of less than 4 on the Mental Status Questionnaire) or physical frailty (such as inability to communicate) and were thus eliminated from the sample. This resulted in 537 elderly persons who were administered a standard interview schedule over the telephone and who are included in this analysis. These comprise 283 African Americans and 254 Whites. This reflects a response rate of approximately 79% of the target sample.

All caregivers of the original sample of 683 elders were eligible to participate in the study. Out of 683 possible caregivers, 361 caregivers of elderly persons in the sample and 146 caregivers of those seniors who were unable to or refused to participate were interviewed on the telephone with a standardized survey questionnaire. This is a response rate of about 74% among eligible caregivers. Twelve elderly persons did not have a caregiver, 7 caregivers could not communicate, 13 could not be reached, and 36 refused to participate. The 15 caregivers of “other” ethnicities were dropped, and analyses were conducted on the remaining 492 caregivers (265 African Americans and 227 Whites). Elderly people and caregivers were asked similar questions in separate survey questionnaires and were analyzed separately.

Measuring Attitudes Toward Rest Homes

Prior literature on attitudes toward long-term institutional care does not provide a consistent set of attitudinal factors to be considered in analyses. Each study measures attitudes differently, broadly indicating positive or negative feelings along a variety of dimensions. We used nine items to assess the desire for home care versus acceptance of long-term rest home care. Through exploratory factor analysis, we investigated the underlying factor structure of these items. Three factors emerged. Prior to analyzing the structural equations, we examined whether the measurement model was the same for African Americans and Whites. It was, and this preliminary analysis is available upon request. The fact that the measurement model is statistically equivalent for both ethnic groups suggests that the process of attitude formation is similar for both ethnic groups. This implies that ethnic differences in attitudes are at least partly a reflection of the different structural conditions experienced by the two groups.

Guided by the factor analyses, we focus on three specific underlying latent attitudinal constructs. The first emphasizes that in-home family care is preferable to rest home placement. The second is a negative attitude toward rest homes as places to receive long-term care. These two constructs cast particular light on whether minority families articulate a greater preference toward familism—taking care of their own—or express more disfavor toward rest homes. Third, a single item rating willingness to reside in a rest home (asked of elderly persons) or willingness to place an elderly person in one (asked of caregivers) is analyzed.

The first two attitudes are each analyzed as latent constructs measured by questions on several relevant dimensions. Each question ascertains strength of agreement with a statement about an aspect of rest home care, measured on a four-point scale. For elderly persons and caregivers, rest homes were defined during the interview as “places where people go when they can no longer

live on their own and need some help.” Thus, attitudes toward long-term care facilities defined as broadly as possible are analyzed. The latent construct, preference for family care, was measured by four similarly worded items administered to both elderly persons and caregivers. The items were assessed on a four-point scale with higher scores indicating disagreement. The items are “Homes are for people with no family,” “Elderly people are always better off with family or friends than in rest homes,” “Adult children should have to care for elderly parents,” and “If family loved you, they would never place you in a rest home/If family loved the elderly person [in their care] they would never place them in a rest home.” The items were reverse coded so that a higher score on the construct indicates a greater preference for family care.

For the latent attitude indicating negative perception of rest homes, we also used four similarly worded statements for elderly persons and caregivers. The items include “I would rather die than go to a rest home/Rather elderly person die than go to rest home” (reverse coded), “Rest homes are pleasant places” (reverse coded), “Homes are where people go to die,” and “People in homes are lonely and depressed” (reverse coded). A higher score on this construct indicates more negative perception of rest homes.

The third construct, unwillingness to use a rest home, was measured by a single item with a four-point scale among elderly persons and a dichotomy among caregivers. The query was “It would be OK with you to go to a rest home” (asked of elderly people) and, for caregivers, “It would be OK with you for the elderly person [in your care] to go to a rest home.” Among elderly persons, a higher score indicated greater unwillingness and was analyzed using linear structural equation models, or LISREL, as an outcome of the background covariates plus the two attitudes described above. Among caregivers, unwillingness to place the elderly person in a rest home was coded 1 (willingness was coded 0) and was analyzed by logistic regression techniques, with the background covariates and the two prior attitude constructs as independent variables.

Measuring Covariates of Attitudes

The explanatory factors considered in this study for elderly persons and caregivers comprise ethnicity (African Americans coded 1) and demographic characteristics such as age in years and sex (males coded 1). Socioeconomic structural indicators included education (years of schooling). Financial need was measured for caregivers by annual household income on an eight-point scale with higher values showing lower income. But, for elderly persons, financial need was indicated by whether they were receiving Medicaid (coded 1). Measures of condition of health for elderly persons included the ADL/IADL score, and for the caregiver, the number of activity-limiting conditions he or she had. Subjective perception of health status was asked of both elderly persons and caregivers (good or fair coded 0, poor coded 1).

Family and community ties were measured by coding 1 if an elderly person was married and 0 if otherwise. The number of elderly persons’ children, and of any other kin residing within an hour’s drive, were included. If the elderly person received care from friends, or family, or church, or from paid help, they were coded 1 in each case and 0 if otherwise. Caregivers’ marital status was coded as 1 if married. The number of caregivers’ children and their siblings were coded. Prior rest home experience for caregivers was indicated by having had a friend or family

member who ever lived in a rest home, coded 1 if yes and 0 otherwise. This information was not ascertained for elderly persons.

Burden-of-care indicators were ascertained for caregivers. These included whether the caregiver states he or she needs help taking care of the elderly person or whether anyone assists in the care of the elderly person, both scored 1 if present, 0 otherwise. The strength of caregiver's feeling that taking care of the elderly person is producing stress or hardship in his or her life and the strength of the feeling that taking care of the elderly person is having a negative impact on the caregiver's relationship with his or her family were both used; a higher score indicates more negative feelings. The number of medical conditions suffered by the elderly person was used. The elderly person's ADL/IADL score was also used as well as a five-point scale indicating duration of care, with a higher score indicating greater time.

Sample Characteristics

The sample of elders was roughly 29% male and 63% urban. Both African American and White elders in the sample were, on average, 75 years old at the time of the survey (ranging in age from 66 years to 98 years). They did not significantly differ from each other in subjective perception of their health status. However, in bivariate associations, African Americans appeared significantly more impaired in ADLs or IADLs than did Whites. Both ethnic groups averaged approximately 4 out of 18 possible medical conditions, ranging from arthritis to rheumatic heart disease. African Americans had significantly more children on average than did Whites (3.2 vs. 2.6). Notably, when examined in a bivariate association, there was no significant ethnic difference in the unwillingness to join a rest home.

African Americans and Whites differed significantly in socioeconomic status indicators: More minority elders were financially needy (25% vs. 4%) and had two fewer years of schooling on average (8.8 vs. 10.8). Fewer were married (31% vs. 42%). Significantly more African American than White elders relied on help from church networks (24% vs. 16%), and fewer relied on paid help (21% vs. 29%) or family help (67% vs. 75%). No differences were apparent in reliance on friends.

Caregivers also showed no significant ethnic difference in the proportion unwilling to place an elderly person in a rest home (41% among Whites and 48% among African Americans). They did not differ significantly in subjective perception of health conditions. About 30% were male, and 61% were urban residents. Average age was 56 years (range 24 years to 90 years). African American caregivers had fewer years of schooling on average than did White caregivers (11.6 years vs. 12.6), and more were economically needy (56% vs. 27%), reflecting the intergenerational persistence of socioeconomic disadvantage. Fewer African American caregivers were married (50% vs. 75%), but they had more children on average (2.4 vs. 1.9). Fewer African Americans knew a friend or family member who had ever been in a rest home (47% vs. 75%). Significant ethnic differences in caregiver burden indicators showed that African American caregivers scored lower than White caregivers on indicators of feeling stress or hardship while taking care of the elderly person or feeling that their lives were negatively affected by taking care of the elderly person.

Analytic Strategy

Researchers call for an examination of the role of ethnicity in health service use that goes beyond specifying only the magnitude of the impact of membership in a particular group on the outcome of interest (Miller et al. 1996; Wolinsky et al. 1989). This study aims not only to document the extent to which African Americans and Whites hold different attitudes toward rest homes and family care but also to investigate possible differences in the pattern of covariates of attitudes between these groups. LISREL was used to (1) test for ethnic differences in the relationships of the exogenous variables with attitudes toward rest homes, (2) examine the reciprocal relationship between dislike of homes and preference for family care, and (3) control for measurement error.

Linear structural equation techniques model the impact of the exogenous background variables (demographic factors, health factors, caregiver network, family ties, socioeconomic status, burden-of-care indicators, and prior rest home experience) on the first two attitude constructs. The reciprocal impact of these two attitudes on each other is also tested. Then, the relationships between the exogenous factors, the two attitude constructs (treated as endogenous variables), and unwillingness to consider rest home placement are analyzed. Differences in the slopes of the equations for African Americans and Whites are analyzed using the group procedure in LISREL. For caregivers, only the third dependent variable, unwillingness to place the elderly person in a rest home, is analyzed using maximum likelihood estimation in logistic regression analysis.

Results

The analysis of differences in the structural equations for African Americans and Whites was conducted first and included comparisons of the models for African American elders to Whites and the models of African American caregivers to Whites in a group analysis in LISREL. The χ^2 for the group analysis of elderly persons was 468.80 with 374 degrees of freedom. Researchers have used various statistics to assess the adequacy of the model. One is the χ^2/df ratio in which a ratio of 3 to 1 is often seen as acceptable. In this analysis, it is 1.25, signifying an acceptable fit. While this is a relatively good fit, the probability associated with it is .001. In a strict sense, this argues for rejecting the null hypothesis of no difference between the observed correlations and those that would be generated by our model. However, there are other measures of fit to consider, including the goodness-of-fit index and Hoelter's *CN*, which are also used to assess the adequacy of models. The goodness-of-fit index was .94, and Hoelter's *CN* was 415.43, both of which represent a good fit. On the basis of the relatively good χ^2/df ratio and the other two measures of fit, we accepted the null hypotheses of no difference. Similarly, the model constraining the structural equations to be equal between African American and White caregivers, a group analysis, resulted in a χ^2 of 326.65 with 283 degrees of freedom, or a χ^2/df ratio of 1.15, $p = .04$; a goodness-of-fit index of .94; and Hoelter's *CN* of 428.31. We therefore judged the model to be the same for both ethnic groups and proceeded to analyze one model for elderly persons and one for caregivers, examining the additive effect of ethnicity in both cases. The final assessment of model fit pertains to the models in which ethnicity is included as an additive effect on the outcome measures. The additive model for elderly persons had a fit of 227.15 with 121 degrees of freedom, χ^2/df of 1.88, goodness-of-fit index of .96, and Hoelter's *CN* of 312.53. The additive model for caregivers had a similar fit of $\chi^2 = 208.45$, 142 *df*, $\chi^2/df = 1.47$, goodness of fit index = .96, and Hoelter's *CN* = 336.65. Table 1 gives the lambda

coefficients (factor loadings) of each indicator of the unmeasured constructs. It is important to note that all coefficients are statistically significant and that, therefore, all items significantly relate to the underlying construct. The items, however, differ in magnitude. In particular, variables indicating preference for family care show greater disparity in item strength.

Table 1. Lambda-Y Standardized Estimates for Perceptions of Rest Homes: Elderly Persons and Caregivers

Predictors	Elderly Persons		Caregivers	
	Prefer Family Care	Dislike Rest Homes	Prefer Family Care	Dislike Rest Homes
Homes are for people with no family	.26		.32	
Elderly persons are always better off with family or friends than in a rest home	.36		.44	
Adult children should have to care for elderly parents	.60		.37	
If family loved you, they would never place you in a home	.77		.77	
I would rather die than go to a rest home/Rather elderly person died than go to rest home		.61		.38
Rest homes are pleasant places		.58		.45
Rest homes are where people go to die		.30		.42
People in homes are lonely and depressed		.35		.54
<i>n</i>	443		441	

NOTE: All lambda coefficients are significant at $\alpha = .05$ or better.

Results of the structural equation analyses of preferring family care are presented in Table 2 in separate columns for elderly persons and caregivers. Among elders as well as caregivers, African Americans are more likely than Whites to express a preference for family care.

Among elderly persons, older people and men prefer family care more, as do those who perceive that their health is poor. Higher socioeconomic status is associated with less preference for family care, as higher education is negatively associated and economic disadvantage tends to be positively associated with preference for family care.

Among caregivers, in addition to ethnicity, we again see that men prefer family care more. Those who have more education tend to prefer family care less, while being married is more complex and only approaches significance. The caregivers may be the married partner or may be the elderly person's married child. It is the latter circumstance that we expect is negatively related to a preference for family care.

Certain burden-of-care indicators, such as increased feelings of stress and hardship in the caretaking role, lower preference for family care, while duration of care has a similar but less significant effect. Having had a friend or family member in a rest home suggests that experience with institutional care might lower preference for family care.

Examining differences in the slopes of these equations indicated no apparent group differences between African Americans and Whites in the pattern of determinants of attitudes. Among elderly persons, no reciprocal relationship was evident between preference for family care and dislike of rest homes; among caregivers, though, dislike of rest homes was associated with preferring family care, but preference for family care did not influence attitudes toward long-

term care homes for elders and caregivers. Among caregivers, several models were tested to examine variables affecting preference for family care. It was consistently observed that very little of the variation in the dependent variable could be explained by the models. However, one of the most stable effects was that of dislike for rest homes influencing preference for family care.

Table 2. LISREL Estimates of Preference for Family Care: Elderly Persons and Their Caregivers

Predictors	Standardized Estimate	
	Elderly Persons	Caregivers
African American	.320**	.284**
Demographic characteristics		
Age	.142**	-.007
Male	.184**	.198**
Health conditions		
Self-perceived health status	.134**	.062
ADL/IADL dependency score (elderly persons)/activity-limiting conditions (caregivers)	.054	.082
Number of medical conditions	.007	Not ascertained
Caregiver selection and network: Help from		Not applicable
Friends	—	
Church	.070	
Paid help	-.063	
Family	.061	
Family ties		
Currently married	-.062	-.094*
Number of children	-.025	.018
Number of other kin (elderly persons)/siblings (caregivers)	-.008	.069
Socioeconomic status		
Years of education	-.231**	-.228**
Economically needy	.085**	—
Friend or family member ever in rest home	Not ascertained	-.118*
Burden of care	Not applicable	
Caregiver needs help caring for elderly person		-.020
Someone helps care for elderly person		-.066
Elderly person has multiple health problems		-.013
Elderly person's ADL/IADL score		—
Duration of care		-.094*
Caregiver feels stress/hardship taking care of elderly person		-.174**
Caregiver's life negatively affected by caregiving		-.056
Dislike of rest homes	.311	.466**

NOTE: A dash indicates that the variable was omitted for the model specification. ADL= activities of daily living; IADL = instrumental activities of daily living. Significance based on *t* values of unstandardized estimates are not reported here. Estimates reported are net of controls for missing data that were not significant.

** α = .05 or less (two-tailed). * α = .10 or less (two-tailed).

Table 3 presents structural equation coefficients associated with dislike of rest homes for elderly people and caregivers. Again, the persistent relationship of ethnicity with dislike for rest homes is apparent when controlling for other background variables. In fact, among elderly persons and caregivers, relatively few other variables significantly predict dislike of homes. Notably, in

contrast to Table 2 (in which African Americans had greater preference for family care), African Americans express less dislike for homes than Whites do. Among elderly persons, those who receive help from friends or family tend to dislike rest homes less. Among caregivers, those who are economically needy have a greater dislike of rest homes. Older age of caregiver has a tendency to reduce the dislike of rest homes. Again, group differences across ethnicities were not apparent in the pattern of determinants.

Table 3. LISREL Estimates of Dislike of Rest Homes: Elderly Persons and Their Caregivers

Predictors	Standardized Estimate	
	Elderly Persons	Caregivers
African American	-.357**	-.236**
Demographic characteristics		
Age	-.030	-.133**
Male	—	—
Health conditions		
Self-perceived health status	.002	.010
ADL/IADL dependency score (elderly persons)/activity-limiting conditions (caregivers)	-.006	-.064
Number of medical conditions	.092	Not ascertained
Caregiver selection and network: Help from		Not applicable
Friends	-.124*	
Church	-.100	
Paid help	-.018	
Family	-.105*	
Family ties		
Currently married	.004	.056
Number of children	-.017	.049
Number of other kin (elderly persons)/siblings (caregivers)	-.036	-.022
Socioeconomic status		
Years of education	-.084	-.108
Economically needy	.060	.362**
Friend or family member ever in rest home	Not ascertained	.002
Burden of care	Not applicable	
Caregiver needs help caring for elderly person		-.074
Someone helps care for elderly person		.097
Elderly person has multiple health problems		-.080
Elderly person's ADL/IADL score		.153**
Duration of care		.084
Caregiver feels stress/hardship taking care of elderly person		.118
Caregiver's life negatively affected by caregiving		.008
Preference for family care	-.019	-.180

NOTE: A dash indicates that the variable was omitted for the model specification. ADL= activities of daily living; IADL = instrumental activities of daily living. Significance based on *t* values of unstandardized estimates are not reported here. Estimates reported are net of controls for missing data that were not significant.

** α = .05 or less (two-tailed). * α = .10 or less (two-tailed).

The final step of the analysis examines elderly persons' unwillingness to be placed in a rest home and caregivers' reluctance to place someone in a home (see Table 4). Among elderly persons, attitude variables appear as the strongest predictors; dislike for rest homes and preference for

family care both strengthen this unwillingness. However, of the remaining variables, ethnicity is the strongest predictor of unwillingness to enter a rest home, with African American elders being less willing (more unwilling). Married elderly persons and women are also more unwilling to enter a rest home.

Table 3. LISREL Estimates of Being Unwilling to Use a Rest Home (elderly persons) and Maximum Likelihood Estimates of Being Unwilling to Place an Elderly Person in One (caregivers)

Predictors	Elderly Persons (standardized estimate)	Caregivers (maximum likelihood estimate) ^a
African American	.154**	-.235
Demographic characteristics		
Age	.078	-.050**
Male	-.110**	-.731**
Health conditions		
Self-perceived health status	-.023	.101
ADL/IADL dependency score (elderly persons)/activity-limiting conditions (caregivers)	.085*	-.021
Number of medical conditions	.005	—
Caregiver selection and network: Help from		Not Applicable
Friends	.077	
Church	-.041	
Paid help	.019	
Family	.004	
Family ties		
Currently married	.105**	.160
Number of children	.031	.021
Number of other kin (elderly persons)/siblings (caregivers)	0.022	.090*
Socioeconomic status		
Years of education	.028	.055
Economically needy	-.067	.129
Friend or family member ever in rest home	Not ascertained	.197
Burden of care	Not applicable	
Caregiver needs help caring for elderly person		-.016
Someone helps care for elderly person		-.158
Elderly person has multiple health problems		.034
Elderly person's ADL/IADL score		-.052*
Duration of care		.016
Caregiver feels stress/hardship taking care of elderly person		-.183*
Caregiver's life negatively affected by caregiving		-.123*
Attitudes		
Dislike of rest homes	.521**	.163**
Preference for family care	.204**	.157**

NOTE: A dash indicates that the variable was omitted for the model specification. ADL= activities of daily living; IADL = instrumental activities of daily living. Significance based on *t* values of unstandardized estimates are not reported here. Estimates reported are net of controls for missing data that were not significant.

a. Maximum likelihood estimates are from logistic regression procedures.

** α = .05 or less (two-tailed). * α = .10 or less (two-tailed).

Among caregivers, notably, maximum likelihood estimates indicate that ethnicity does not significantly alter the willingness or unwillingness to place an elderly person in a rest home. Dislike for such homes and preference for family care are the strongest predictors of unwillingness to place the elderly person in a rest home. Male caregivers, as well as younger caregivers, are more willing (less unwilling) to use rest homes. Some variables have marginal effects. Caregivers with more siblings appear less willing (more unwilling) to place the elderly person in a home, presumably because they share the burden of care among the siblings. Caregivers of elderly persons with greater ADL/IADL dependency tend to be more willing (less unwilling) to place an elderly person in a rest home. Caregivers who feel more stress or hardship tend to be more willing, as do those who feel their family lives are more negatively affected by caregiving. The overall model had significant statistical explanatory power, with the -2 loglikelihood chi-square statistic = 459.40, 20 *df*, and $p = .0000$.

Conclusions and Discussion

Notwithstanding the move to postpone placement as long as possible to contain costs of care, the ideal that elderly persons' needs should ultimately determine admission to a long-term care facility remains. Need itself, especially perceived need, is emerging as largely a product of background social structure and health beliefs, along with biomedical necessity (Andersen 1995). Interest thus remains in clarifying determinants of long-term institutional care use, particularly from perspectives that consider social concerns along with organizational or individual issues and that are sensitive to issues of equity along with efficiency.

This study hypothesized ethnic differences in attitudes toward care by families and in long-term care facilities and a pattern of social causation of health beliefs indicated by the correlates of attitudes. An amendment was proposed to the Andersen theoretical framework, the model predominantly used to consider behavioral bases of health service use, to correctly specify attitudes toward and willingness to use long-term care facilities for elderly persons as outcomes of social structural correlates rather than as static and previously given.

The findings reported here lend support to our proposed amendment to the model. The results suggest that while the process of attitude formation appears the same across ethnic groups, there are indeed ethnic differences in attitudes toward rest homes. Prior explanations for observed ethnic variation in residence patterns and use of long-term care facilities by the elderly included a speculation that minority groups prefer to take care of their own within a family setting and therefore disdain institutional care. This speculation is sparsely documented (Belgrave et al. 1993). In fact, Burton et al. (1995) find almost no ethnic difference in the size of caregiving networks and observe that Blacks are more likely to have a nonfamily caregiver among unpaid care providers.

Our results suggest that preference for family care and disfavor of homes do not go hand in hand in the direction suggested by speculation. While African Americans express greater preference for family care, they dislike rest homes significantly less than Whites do, controlling for other factors. Despite this, African American elders (but not caregivers) were significantly more unwilling to consider rest home placement once other factors were controlled. Among elderly persons and caregivers, unwillingness to consider rest home admission is most strongly predicted

by the other two attitudes, namely, dislike of rest homes and preference for family care. These factors were in turn influenced by ethnic group membership, and further, among caregivers, dislike of homes increased preference for family care. This pattern of findings indicates that, while preference for family care does, indeed, play a role in the long-term care choices of minorities, this is in part driven by disfavor for rest homes, not by favor of family care.

Such a finding is understandable in light of the history of race relations, the enduring ethnic stratification, and the organizational characteristics of long-term care facilities in the southern United States, which see homes serving clientele predominantly of one ethnic group. This leads to an enforced reliance on extended family and “fictive” kin networks among groups who may feel excluded from access to institutional care. Although African Americans may draw from the African cultural heritage of extended kin networks for caregiving (Stoller and Gibson 1994), the cultural expression preferring familial care is at least partly shaped by economics and by perceived lack of alternatives.

Researchers stress the pivotal role of families in averting institutionalization among the general population (Aneshensel et al. 1995:6) and among African Americans (Bryant and Rakowski 1992). However, Bryant and Rakowski also warn that changes in African American demographic patterns and family structures will lead to future cohorts of minority elderly having fewer and more distant family network resources on which to rely. Thus, if minority elders rely on family care due to perceived lack of acceptable alternatives, future cohorts will be in an increasingly vulnerable position. This is underscored by the finding that although elderly minorities were more unwilling to use rest homes, caregivers showed no ethnic difference in reluctance or unwillingness to place an elderly person in a rest home.

The results also support the contention that attitudes and health beliefs are not exogenous or static characteristics impervious to structural influence. In addition to ethnicity, the multivariate analyses identified the role of education, economic need, self-perceived health status, and demographic characteristics in affecting strong preference for family care among elderly persons, and of burden of care, prior institutional experience, and dislike of homes among caregivers. Furthermore, along with ethnicity, economic need and ADL/IADL needs of the elderly person increased dislike of rest homes among caregivers, while ethnicity and caregiver network did so among elderly persons. Unwillingness to use a rest home was most strongly affected by the other two attitudes among elderly persons and caregivers. Therefore, analyses that consider attitude variables as purely exogenous or that interpret cultural expressions as preexisting or inherited and therefore immutable factors are inaccurate.

This is reinforced by the factor analyses that found no variation in factor loadings between ethnic groups and the structural equations that found no difference in the slopes of equations across ethnicity, indicating that attitude constructs and processes are similar among groups. This suggests that individuals of different ethnicities respond to structural conditions in similar ways and that varying expressions of values and beliefs are at least partly a reflection of the structural and historical diversity that ethnic groups experience.

Therefore, instead of opposing structural factors (poverty, discrimination, barriers to access, and unfamiliarity with the system) and cultural factors (preference for family care) as competing

explanations for ethnic differences in care choices, we suggest that these factors are interrelated. Cultural variables such as attitudes are to some extent dynamically determined by structural characteristics and individual lifetime experiences. Both types of factors might therefore jointly influence observed ethnic variations, a contention also made by other scholars (Belgrave et al. 1993; Mutran 1985). Our results suggest that future theoretical approaches should model such dynamic relationships.

The persistence of ethnicity as a significant explanatory variable after controlling for other factors calls for further exploration of its role in attitudes toward and use of health services beyond what we have been able to analyze here. Among other limitations of this study, we acknowledge that since the arguments about the dynamic nature of attitudes are drawn from a cross-sectional data set, the inferences must be interpreted as suggestive and require further verification using longitudinal data. Additional details of attitudes and experience among different ethnic groups should be fleshed out using qualitative data, which can more accurately guide the generation and statistical testing of hypotheses in future studies. Further research should also specifically distinguish among the various kinds of long-term care facilities that are now available for elderly persons. While the sample in this study was specifically designed to capture ethnic contrasts, there was some attrition of numbers of respondents in each step of identifying seniors and caregivers, screening for study eligibility, refusal to participate, and inability to do so. Despite this, the survey achieved a response rate of 74% (caregivers) to 79% (elderly persons) among the target samples. Notwithstanding these caveats, the findings cast light on a little explored but nonetheless important area in the literature on ethnic group membership and the elderly experience with long-term institutional care.

AUTHORS' NOTE

This research was supported by the National Institute on Nursing Research Grant RO1 NR 03406. We thank Marshall J. McKiver for help with questionnaire design and Robert S. Kintz and David Butler Perry for editorial assistance and manuscript preparation. Correspondence regarding this article should be addressed to Dr. Elizabeth J. Mutran, Director, Center on Minority Aging, the University of North Carolina at Chapel Hill, CB 3465, Chapel Hill, NC 27599-3465; betty_mutran@unc.edu.

REFERENCES

- Andersen, Ronald M. 1995. "Revisiting the Behavioral Model and Access to Medical Care: Does It Matter?" *Journal of Health and Social Behavior* 36:1-10.
- Aneshensel, Carol L., Leonard I. Pearlin, Joseph T. Mullan, Steven H. Zarit, and Carol Whitlash. 1995. *Profiles in Caregiving: The Unexpected Career*. San Diego, CA: Academic Press.
- Belgrave, Linda L., May L. Wykle, and Jung M. Choi. 1993. "Health, Double Jeopardy and Culture: The Use of Institutionalization by Elderly African Americans." *The Gerontologist* 33:379-85.
- Biedenharn, Paula J., and Janice B. Normoyle. 1991. "Elderly Community Residents' Reactions to the Nursing Home: An Analysis of Nursing-Home Related Beliefs." *The Gerontologist* 31:107-15.

- Bryant, Sharon, and William Rakowski. 1992. "Predictors of Mortality Among Elderly African Americans." *Research on Aging* 14:50-67.
- Burton, Lynda, Judith Kasper, Andrew Shore, Kathleen Cagney, Thomas LaVeist, Catherine Cubbin, and Pearl German. 1995. "The Structure of Informal Care: Are There Differences by Race?" *The Gerontologist* 35:744-52.
- Cafferata, Gail L., and Robyn Stone. 1992. "Community Care Givers' Attitudes Towards Nursing Homes." *Journal of Long-Term Care Administration* 19:33-36.
- Cohen, Marc A., Eileen J. Tell, Helen. L. Batten, and Mary J. Larson. 1988. "Attitudes Towards Joining Continuing Care Retirement Communities." *The Gerontologist* 28:637-43.
- Falcone, David, Elise Bolda, and Sandra C. Leak. 1991. "Waiting for Placement: An Exploratory Analysis of Determinants of Delayed Discharges of Elderly Hospital Patients." *Health Services Research* 26:339-74.
- Greene, Vernon L., and Jan I. Ondrich. 1990. "Risk Factors for Nursing Home Admissions and Exits: A Discrete-Time Hazard Function Approach." *Journals of Gerontology* 45:S250-S258.
- Himes, Christine L., Dennis P. Hogan, and David J. Eggebeen. 1996. "Living Arrangements of Minority Elders." *Journal of Gerontology: Social Sciences* 51B:S42-S48.
- Hing, Esther. 1987. *Use of Nursing Homes by the Elderly: Preliminary Data From the 1985 National Nursing Home Survey*. Advance Data No. 135, March 1987. Hyattsville, MD: National Center for Health Statistics.
- Kart, Cary S. 1991. "Variation in Long-Term Care Service Use by Aged Blacks." *Journal of Health and Aging* 3:511-26.
- Kulys, Regina. 1990. "The Ethnic Factor in the Delivery of Social Services." Pp. 629-61 in *Handbook of Gerontological Services*, 2d ed., edited by A. Monk. New York: Columbia University Press.
- Mechanic, David. 1993. "Social Research in Health and the American Sociopolitical Context: The Changing Fortunes of Medical Sociology." *Social Science and Medicine* 36:95-102.
- Mechanic, David. 1995. "Emerging Trends in the Application of the Social Sciences to Health and Medicine." *Social Science and Medicine* 40:1491-96.
- Miller, Baila, Richard T. Campbell, Lucille Davis, Sylvia Furner, Aida Gaichello, Thomas Prohaska, Julie E. Kaufman, Min Li, and Carmen Perez. 1996. "Minority Use of Community Long-Term Care Services: A Comparative Analysis." *Journal of Gerontology: Social Sciences* 51:S70-S81.
- Mui, Ada C., and Denise Burnette. 1994. "Long-Term Care Service Use by Frail Elders: Is Ethnicity a Factor?" *The Gerontologist* 34:190-98.
- Mutran, Elizabeth J. 1985. "Intergenerational Family Support Among Blacks and Whites: Response to Culture or Socioeconomic Differences?" *Journal of Gerontology* 40:382-89.

- Mutran, Elizabeth J., and Kathleen F. Ferraro. 1988. "Medical Need and Use of Services Among Older Men and Women." *Journal of Gerontology: Social Sciences* 43:S162-S171.
- Pescosolido, Bernice A., and Jennie J. Kronenfeld. 1995. "Health, Illness, and Healing in an Uncertain Era: Challenges From and for Medical Sociology." *Journal of Health and Social Behavior* (special issue): 5-33.
- Pynoos, Jon, and Stephen Golant. 1996. "Housing and Living Arrangements for the Elderly." Pp. 303-24 in *Handbook of Aging and the Social Sciences*, 4th ed., edited by R. H. Binstock and L. K. George. San Diego, CA: Academic Press.
- Smith, David B. 1993. "The Racial Integration of Health Facilities." *Journal of Health Politics, Policy and Law* 18:851-69.
- Stoller, Eleanor Palo, and Rose C. Gibson. 1994. "The Diversity of American Families." Pp. 159-172 in *Worlds of Difference: Inequality in the Aging Experience*, edited by E. P. Stoller and R. C. Gibson. Thousand Oaks, CA: Pine Forge Press.
- Tennstedt, Sharon, and Bei-Hung Chang. 1998. "The Relative Contributions of Ethnicity Versus Socioeconomic Status in Explaining Differences in Disability and Receipt of Informal Care." *Journal of Gerontology: Social Sciences* 53B (2): S61-S70.
- Wallace, Steven P. 1990. "The Political Economy of Health Care for Elderly African-Americans." *International Journal of Health Services* 20:665-80.
- Wallace, Steven P., Lene Levy-Storrs, Raynard S. Kington, and Ronald M. Andersen. 1998. "The Persistence of Race and Ethnicity in the Use of Long-Term Care." *Journal of Gerontology: Social Sciences* 53B (2): S104-S112.
- White-Means, Shelley I., and Michael C. Thornton. 1990. "Ethnic Differences in the Production of Informal Home Health Care." *The Gerontologist* 30:758-68.
- Wolinsky, Fredric D., Benigno E. Aguirre, Lih-Jiuen Fann, Verna M. Keith, Connie L. Arnold, John C. Niederhauer, and Kathy Dietrich. 1989. "Ethnic Differences in the Demand for Physician and Hospital Utilization Among Older Adults in Major American Cities: Conspicuous Evidence of Considerable Inequalities." *Milbank Quarterly* 67:412-49.
- Yeo, Gwen W. 1993. "Ethnicity and Nursing Homes: Factors Affecting Use and Successful Components for Culturally Sensitive Care." Pp. 161-177 in *Ethnic Elderly and Long-Term Care*, edited by C. M. Barresi and D. E. Stull. New York: Springer.